CLAIMS

1.   A transactional computer system comprising a plurality of entities including at least one entity of each of the following forms:
        a first entity (Thing entity) having the properties of identifying a client system and uniquely identifying an object in that client system;
        a second entity (Proposal entity) for defining a transaction, the second entity being subordinate directly or indirectly to a first entity and having the properties of modelling at least one external agent to carry out a transformation in relation to the first entity; and
        a third entity (Decision entity) capable of communicating with a second entity and having the properties of defining the types of decision that may be made, and determining the responses in relation to those decisions.

2.   A computer system according to claim 1, further comprising at least one fourth entity (Assignment entity) subordinate to an associated first entity, the fourth entity having the properties of uniquely identifying the associated first entity, and identifying a particular type of assignment or transformation to be applied to the first entity.

3.   A computer system according to claim 2, in which the fourth entity also identifies a quantity.

4.   A computer system according to claim 1, in which an agent modelled by the second entity includes at least two parties to a transaction.

5.   A computer system according to claim 4, in which the second entity additionally identifies the direction of negotiation between the parties.

6.   A computer system according to claim 1, further
comprising at least one second entity (Subordinate
Proposal entity) which is subordinate to another second
entity, and includes the property of identifying the other
5   second entity to which it is subordinate.

7.   A computer system according to claim 1, further
comprising a plurality of associated second entities
(Sibling Proposal entities) all of which are directly
subordinate to another second entity and each including
10   the property of identifying the other second entity to
which they are subordinate whereby the said associated
second entities include quantities which together
correspond to the quantity of the said another second
entity to which they are subordinate.

15   8.   A computer system according to claim 1, in which the
third entity is multidimensional and contains
multidimensional vectors indicative of values resulting
from an associated second entity.

9.   A computer system according to claim 8, in which at
20   least one third entity is a partial entity indicating a
partial response from a second entity.

10.   A computer system according to claim 1, further
comprising at least one further entity (Tender entity)
associated with a plurality of second entities and a
25   single first entity, and identifying at least a quantity.

11.   A computer system according to claim 1, in which the
system does not validate data input into the system.

12.   A computer system according to claim 1, in which the
system provides for at least the following functions:
30   (i)   creation of a new entity,

(ii)   loading a selected entity or entities into a working
        memory of the computer system,

(iii)   incrementing a multidimensional array,

(iv)   retrieving a value from an entity, and

5   (v)   advising the client system of an event.

13.   A transactional computer system comprising a
plurality of entities including at least one entity of
each of the following forms:
        a first entity (Thing entity) having the properties
10   of identifying a client system and uniquely identifying an
object in that client system;
        a second entity (combined Proposal/Assignment
entity) for defining a transaction, the second entity
being subordinate to a first entity and having the
15   properties of (i) modelling at least one external agent to
carry out a transformation in relation to the first
entity, and (ii) uniquely identifying the associated first
entity, and identifying a particular type of assignment or
transformation to be applied to the first entity; and
20   a third entity (Decision entity) capable of
communicating with a second entity and having the
properties of defining the types of decision that may be
made, and determining the responses in relation to those
decisions.

25   14.   A transactional computer system comprising:
        first means defining a first entity (Thing entity)
having the properties of identifying a client system and
uniquely identifying an object in that client system;
        second means defining a second entity (Proposal
30   entity) for defining a transaction, the second entity
being subordinate directly or indirectly to a first entity
and having the properties of modelling at least one
external agent to carry out a transformation in relation
to the first entity; and

third means defining a third entity (Decision entity) capable of communicating with means defining a second entity and having the properties of defining the types of decision that may be made, and determining the responses in relation to those decisions.

15. A computer system according to claim 14, further comprising at least one fourth means defining a fourth entity (Assignment entity) subordinate to an associated first entity, the fourth entity having the properties of uniquely identifying the associated first entity, and identifying a particular type of assignment or transformation to be applied to the first entity.

16. A computer system according to claim 15, in which the fourth entity also identifies a quantity.

17. A computer system according to claim 14, in which an agent modelled by means defining the second entity includes at least two parties to a transaction.

18. A computer system according to claim 17, in which the means defining a second entity additionally identifies the direction of negotiation between the parties.

19. A computer system according to claim 14, further comprising at least one means defining a second entity (Subordinate Proposal entity) which is subordinate to another second entity, and includes the property of identifying the other second entity to which it is subordinate.

20. A computer system according to claim 14, further comprising a plurality of means defining associated second entities (Sibling Proposal entities) all of which are directly subordinate to another second entity and each including the property of identifying the other second

entity to which they are subordinate whereby the said
associated second entities include quantities which
together correspond to the quantity of the said another
second entity to which they are subordinate.

5   21.   A computer system according to claim 14, in which
the third entity is multidimensional and contains
multidimensional vectors indicative of values resulting
from an associated second entity.

22.   A computer system according to claim 21, in which at
10   least one third entity is a partial entity indicating a
partial response from a second entity.

23.   A computer system according to claim 14, further
comprising at least one means defining a further entity
(Tender entity) associated with a plurality of second
15   entities and a single first entity, and identifying at
least a quantity.

24.   A computer system according to claim 14, in which
the system does not validate data input into the system.

25.   A computer system according to claim 14, in which
20   the system provides for at least the following functions:
(i)   creation of a new entity,
(ii)   loading a selected entity or entities into a working
       memory of the computer system,
(iii) incrementing a multidimensional array,
25   (iv)   retrieving a value from an entity, and
(v)   advising the client system of an event.

26.   A transactional computer system comprising:
       first means defining a first entity (Thing entity)
having the properties of identifying a client system and
30   uniquely identifying an object in that client system;

second means defining a second entity (combined Proposal/Assignment entity) for defining a transaction, the second entity being subordinate to a first entity and having the properties of (i) modelling at least one external agent to carry out a transformation in relation to the first entity, and (ii) uniquely identifying the associated first entity, and identifying a particular type of assignment or transformation to be applied to the first entity; and

third means defining a third entity (Decision entity) capable of communicating with measn defining a second entity and having the properties of defining the types of decision that may be made, and determining the responses in relation to those decisions.

27. A computer system arranged to operate in accordance with a protocol, wherein the protocol causes the computer to generate a plurality of entities including at least one entity of each of the following forms:

a first entity (Thing entity) having the properties of identifying a client system and uniquely identifying an object in that client system;

a second entity (Proposal entity) for defining a transaction, the second entity being subordinate directly or indirectly to a first entity and having the properties of modelling at least one external agent to carry out a transformation in relation to the first entity; and

a third entity (Decision entity) capable of communicating with a second entity and having the properties of defining the types of decision that may be made, and determining the responses in relation to those decisions.

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28.   A method of programming a computer, comprising the
steps of:

   generating a first entity (Thing entity) having the
properties of identifying a client system and uniquely
identifying an object in that client system;

   generating a second entity (Proposal entity) for
defining a transaction, the second entity being
subordinate directly or indirectly to a first entity and
having the properties of modelling at least one external
agent to carry out a transformation in relation to the
first entity; and

   generating a third entity (Decision entity) capable
of communicating with a second entity and having the
properties of defining the types of decision that may be
made, and determining the responses in relation to those
decisions.

29.   A computer program product directly loadable into
the internal memory of a digital computer, and comprising
software code portions for causing the computer to become
a computer in accordance with claim 1 when the product is
run on a computer.

30.   A computer program product directly loadable into
the internal memory of a digital computer, and comprising
software code portions for causing the computer to become
a computer in accordance with claim 14 when the product is
run on a computer.

31.   A computer program product directly loadable into
the internal memory of a digital computer, and comprising
software code portions for causing the computer to become
a computer in accordance with claim 27 when the product is
run on a computer.